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| 10/628,574 | 07/29/2003 | Vittorio Bruno | 2993-487US SC/ip | 4086 |
| 32292 | 7590 | 08/23/2005 | | |
| OGILVY RENAULT LLP (PWC) 1981 MCGILL COLLEGE AVENUE SUITE 1600 MONTREAL, QC H3A 2Y3 CANADA | | | | |
| | | | EXAMINER | |
| | | | RODRIGUEZ, WILLIAM H | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3746 | |

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding:

Office Action Summary

Application No.

10/628,574

Applicant(s)

BRUNO ET AL.

Examiner

William H. Rodriguez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-13 and 15-23 is/are rejected.
- 7) ☒ Claim(s) 8 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This office action is in response to the amendment and remarks filed 6/9/05. Since the examiner has applied new grounds of rejection, this office action is being made non-final to afford the applicant the opportunity to respond to the new grounds of rejection.

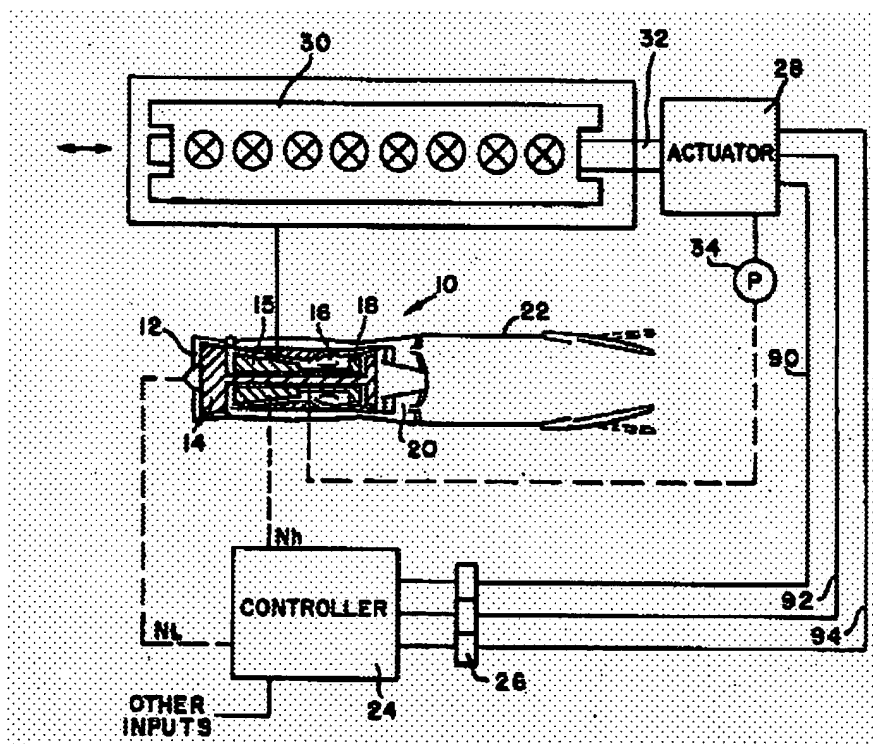
Claim Rejections - 35 USC § 102

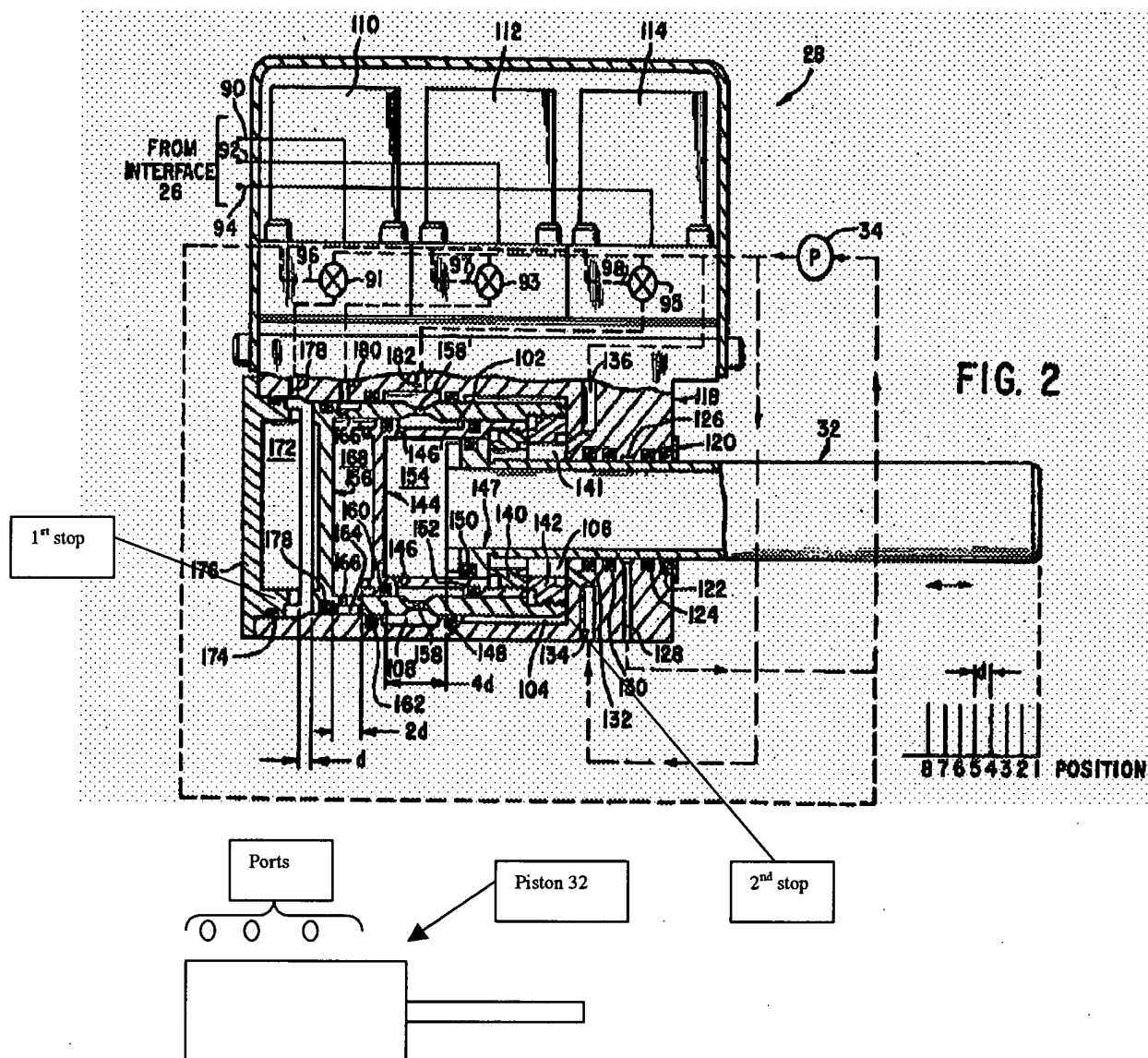
1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-7, 9-13 and 15-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Arnett (US 4,391,092).





With respect to claim 1, Arnett teaches compressor bleed valve system comprising at least one bleed valve 30, and an actuator 28 having a movable piston 32 in a piston casing, the piston being operatively coupled to the bleed valve, the piston being movable to a predetermined axial position set by a relief port (178, 180, 182) which is selectively openable for allowing incoming pressurized fluid to flow out of said piston casing as said piston uncovers said relief port. See particularly **Figures 1, 2**, column 3 line 43 to column 7 line 49.

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With respect to claim 2, **Arnett** teaches that the piston casing has first and second opposed end portions, and wherein said relief port 180 is provided at a location intermediate said first and second opposed end portions.

With respect to claim 3, **Arnett** teaches that the piston is movable from one side of said relief port 180 to an opposed side thereof when said relief port is closed.

With respect to claim 4, **Arnett** teaches that the actuator further comprises a control port 178 provided at a first end portion of said piston casing, said control port being connected to a first valve 91 operable for allowing pressurized fluid to flow into and out of the piston casing.

With respect to claim 5, **Arnett** teaches that said control port 178 and said relief port 180 are in fluid flow communication via said piston casing when said piston uncovers said relief port.

With respect to claim 6, **Arnett** teaches that the piston has a first face adapted to be exposed to fluid pressure, and wherein a first stop is provided in said casing to stop said piston in a first limit position in which said first face of said piston is spaced axially from said control port 178.

With respect to claim 7, **Arnett** teaches that the piston is biased against said first stop.

With respect to claim 9, **Arnett** teaches that said piston is displaceable under fluid pressure to a second limit position in which said second face thereof is pushed against a second stop provided within said piston casing.

With respect to claim 10, **Arnett** teaches that stoppers are provided on either sides of the relief port 180 to physically set the limit positions of the piston.

With respect to claim 11, **Arnett** teaches a system for controlling compressor surge in a gas turbine engine comprising: at least one bleed valve 30; and at least one pressurized fluid

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actuator 28 coupled to the bleed valve to operate the bleed valve to control compressor surge, said actuator mounted for movement in a casing between first, second and third positions, the second position being intermediate the first and third positions, wherein the actuator is moved between said positions upon the supply of a pressurized fluid to an operative portion of the actuator, the actuator having at least one selectively openable opening 180 at a location corresponding to the second position for selectively permitting pressurized fluid to exit the operative portion of the actuator and thereby permit the actuator to remain in said second position. See particularly **Figures 1, 2**, column 3 line 43 to column 7 line 49.

With respect to claim 12, **Arnett** teaches that the actuator is a piston 32 and the casing is a cylinder.

With respect to claim 13, **Arnett** teaches that a portion of the actuator obstructs the opening when the actuator is in the first position.

With respect to claim 15, **Arnett** teaches that the first position is defined by a second selectively openable opening 178 on the actuator.

With respect to claim 16, **Arnett** teaches that the openable openings (178, 180) are in fluid flow communication via the operative portion when the actuator is in the second position.

With respect to claim 17, **Arnett** teaches a gas turbine engine comprising an engine part 30 movable between discrete positions, an actuator 28 coupled to said engine part to actuate the engine part, said actuator comprising a piston 32 mounted for reciprocal movement within a piston casing, said piston being movable from a first end position to a second end position when a pressurized fluid is supplied to a chamber through a first opening 178 defined in said casing, said chamber being defined at least partially by said piston and said piston casing, the actuator

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including a second opening 180 adapted to remove pressurized fluid from said chamber, wherein said piston is selectively retainable in an intermediate position by bleeding pressurized fluid from said chamber through the second opening. See particularly **Figures 1, 2**, column 3 line 43 to column 7 line 49.

With respect to claim 18, **Arnett** teaches that the position of the second opening 180 corresponds to the intermediate position.

With respect to claim 19, **Arnett** teaches a plurality of axially spaced-apart second openings 182 along the piston stroke to permit selective retention of the piston in a plurality of spaced-apart intermediate positions corresponding to the locations of the spaced-apart second openings.

With respect to claim 20, **Arnett** teaches a system comprising a bleed valve 30 operated by an actuator 28 having a piston 32 slidable in a piston casing between first, second and third positions, said second position being intermediate said first and third positions, a first port 178 provided in said piston casing for allowing a pressurized fluid to be selectively supplied into said piston casing in order to displace said piston from said first position to said third position, and a selectively openable outlet port 180 provided in said piston casing at a location corresponding to said second position, whereby when said piston 32 uncovers said outlet port and said outlet port is opened, the pressurized fluid flowing into said piston casing via said first port 178 is permitted to flow out of said piston casing through said outlet port 180, thereby causing said piston 32 to remain in said second position thereof. See particularly **Figures 1, 2**, column 3 line 43 to column 7 line 49.

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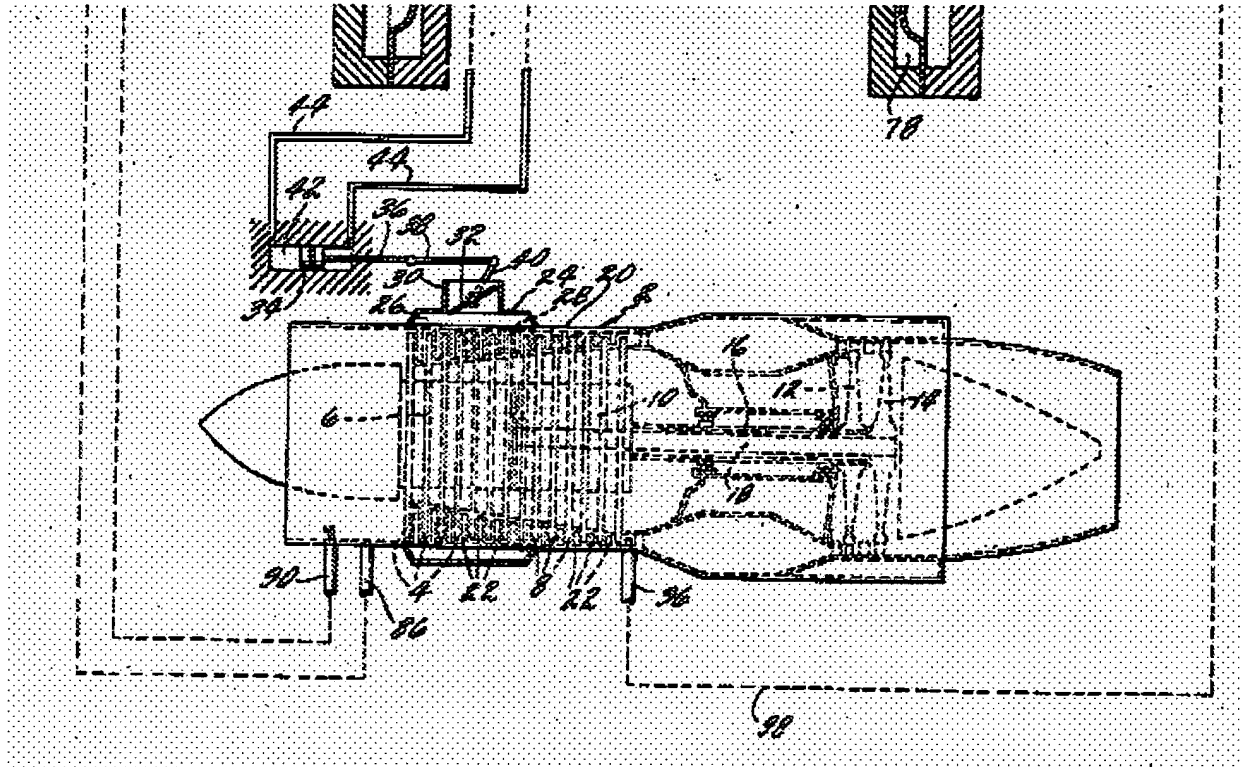
With respect to claim 21, **Arnett** teaches that the first port 178 and said outlet port 180 are in fluid flow communication via said piston casing when said piston 32 uncovers said outlet port 180. See particularly column 3 line 43 to column 7 line 49.

With respect to claim 22, **Arnett** teaches that the pressurized fluid is fuel (column 7 line 31-35).

With respect to claim 23, **Arnett** teaches an actuator 28 including a fluidly movable piston 32 received in a casing for sliding movement between first, second and third positions, the second position being intermediate the first and third positions, the method comprising the steps of: operatively connecting a compressor bleed valve 30 to the actuator 28, biasing said piston 32 towards said first position; directing a pressurized fluid into said casing via a first port 178 to displace said piston away from said first position; and opening a relief port 180 to permit pressurized fluid to flow out of said casing at said second position once said piston 32 uncovers said relief port. See particularly **Figures 1, 2**, column 3 line 43 to column 7 line 49.

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3. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by **Torell** (US 2,863,601).



With respect to claim 1, **Torell** teaches compressor bleed valve system comprising at least one bleed valve 32, and an actuator 34 having a movable piston in a piston casing, the piston being operatively coupled to the bleed valve, the piston being movable to a predetermined axial position set by a relief port 44 which is selectively openable for allowing incoming pressurized fluid to flow out of said piston casing as said piston uncovers said relief port. See particularly **Figures 1**, column 1 line 56 to column 3 line 35.

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Allowable Subject Matter

4. Claims 8 and 14, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The indicated allowability of claims 9, 11-13, 15-19 and 22 is withdrawn in view of the newly discovered reference(s) to **Arnett (US 4,391,092)** and **Torell (US 2,863,601)**. See rejection above.

Response to Arguments

6. Applicant's arguments with respect to claims 1-7, 9-13 and 15-23 have been considered but are moot in view of the new ground(s) of rejection.


Contact information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Rodriguez whose telephone number is 571-272-4831. The examiner can normally be reached on Monday-Friday 7:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy S. Thorpe can be reached on 571-272-4444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 3/18/05
William H. Rodriguez
Examiner
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